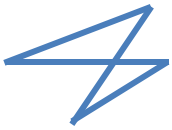
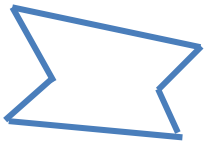
Run for Cover, Aliens

Your class is creating a fun “Space Alien” quilt to display for parent night to go along with your science unit on the Solar System. Using your geo-board to represent your three squares of the quilt, create three different shapes that you can transfer to dot paper and color to be your aliens’ shapes. Each shape must be a closed polygon that you create using only one rubber band. Be creative with your designs. Remember, it must be a closed figure, and the band may not cross over itself at any point. When you have created your shapes, you should classify them according to the number and length of sides, the types of angles contained in the shapes, and other properties. Compare your designs and determine which has the greater area. Which has the greater perimeter?

Not okay 

Not Okay 

Okay 

Novice	No strategy is chosen or a strategy is chosen that will not lead to a solution. Little or no evidence of engagement in the task. Neither correct reasoning nor justification for reasoning is present. Little or no communication of an approach is evident with mathematical language. No connections are made. No attempt is made to construct mathematical representations.
Apprentice	A partially correct strategy is chosen. Evidence of previous knowledge. Arguments are made with some mathematical basis. Some formal math language is used, and examples are provided to communicate ideas. Some effort is made to relate to own interests and experiences. An attempt is made to construct mathematical representations to record and communicate problem solving.
Practitioner	A correct strategy is chosen. Evidence of applying prior knowledge is present. Arguments are constructed with adequate mathematical knowledge. Systematic approach or correct reasoning is present. Precise math language is used with audience in mind. Mathematical connections are recognized. Appropriate mathematical are presentations are used.
Expert	An efficient strategy is used. A correct answer is given. Evidence is used to justify and support decisions. Precise math language is used to communicate to an appropriate audience. Mathematical connections or observations are used to extend the solution. Abstract or symbolic mathematical representations are constructed to analyze relationships, extend thinking and clarify or interpret phenomenon.